IN THE CLAIMS

1. (currently amended) An encoding/transmitting apparatus, comprising:

input means for inputting data ~~that includes video data~~;

encoding means for encoding the inputted data ~~input by the input means~~;

storage means for storing the encoded data ~~generated by the encoding means~~;

multiplexing means for multiplexing the encoded data stored in the storage means, ~~and~~ for transmitting the multiplexed data to a predetermined receiving apparatus through a network, and for generating a multiplexing-completion signal that includes information identifying the encoded data that was multiplexed by the multiplexing means; and

monitoring means for monitoring a state of the network, ~~and for generating a stop command and supplying the stop command to the multiplexing means when the state of the network is undesirable, in which the encoding means stops an encoding process when an area occupied by data in the storage means is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage means is smaller than the predetermined value,~~

in which the multiplexing means controls a bit rate of the ~~stops~~ multiplexing in accordance with the state of the network~~response to the stop command~~, and

in which~~,~~ ~~when the multiplexing means stops multiplexing in response to the stop command,~~ the encoding means calculates based on the multiplexing-completion signal an area occupied by the encoded data in the storage means, releases the area occupied by the encoded data, and

controls a bit rate of the encoding of further data inputted by the input means based on the area that was occupied by the encoded data~~continues the encoding process until the area occupied by data in the storage means is larger than a predetermined value~~.

2. - 3. (cancelled)

4. (previously presented) The encoding/transmitting apparatus according to claim 1, further comprising data-transmission-amount control means for storing and controlling an amount in which the multiplexing means can transmit data.

5. (previously presented) The encoding/transmitting apparatus according to claim 1, wherein the data includes a plurality of program data items, the encoding means encodes the program data items, independently of each other, the storage means stores the encoded program data items, independently of each other, and the multiplexing means multiplexes the encoded program data items, generating one output data item.

6. (currently amended) An encoding/transmitting method, comprising:

~~a step of~~ inputting data ~~that includes video data~~;

~~a step of~~ encoding the inputted data ~~input in the step of inputting~~;

~~a step of~~ storing, in a storage unit, the encoded data ~~generated in the step of encoding the data~~; and

~~a step of~~ multiplexing the encoded data stored in the storage unit by use of a multiplexing unit, ~~and~~ transmitting the multiplexed, encoded data~~,~~ to a predetermined receiving apparatus through a network, and generating a multiplexing-completion signal that includes information identifying the multiplexed, encoded data; ~~and~~

~~a step of~~ monitoring a state of the network, ~~and generating a stop command and supplying the stop command to the multiplexing unit when the state of the network is~~

~~undesirable, in which the encoding stops when an area occupied by data in the storage unit is larger than a predetermined value, and the encoding is performed when the area occupied by the data in the storage unit is smaller than the predetermined value,~~

controlling ~~in which~~ a bit rate of the multiplexing ~~stops~~ in accordance with the state of the network~~response to the stop command;~~,

calculating an area occupied by the encoded data in the storage unit based on the multiplexing-completion signal,

releasing the area occupied by the encoded data, and

controlling a bit rate of ~~in which, when the multiplexing stops in response to the stop command,~~ the encoding of further inputted data based on the area that was occupied by the encoded data~~continues until the area occupied by data in the storage unit is larger than a predetermined value~~.

7. - 8. (cancelled)

9. (previously presented) The encoding/transmitting method according to claim 6, wherein the data includes a plurality of program data items, the program data items are encoded, independently of each other, in the step of encoding the data, the encoded program data items are stored in the storage unit, independently of each other, in the step of storing the encoded data, and the program data items are multiplexed in the step of multiplexing the encoded data, thereby generating one output data item.

10. (currently amended) An encoding/transmitting apparatus, comprising:

an encoding unit ~~to~~ that encodes received data~~that includes video data~~;

a storage unit ~~to~~ that stores the encoded data ~~encoded by the encoding unit~~;

a multiplexing unit ~~to~~ that multiplexes the encoded data received from the storage unit ~~so as~~ to produce multiplexed data, ~~and~~ that transmits the multiplexed data to a predetermined receiving apparatus through a network, and that generates a multiplexing-completion signal that includes information identifying the encoded data that was multiplexed by the multiplexing unit; and

a determining unit ~~to~~ that monitors a state of the network, ~~and generate a stop command and supply the stop command to the multiplex unit when the state of the network is undesirable, in which the encoding unit stops an encoding process when an area occupied by data in the storage unit is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage unit is smaller than the predetermined value,~~

in which the multiplexing unit ~~stops~~ controls a bit rate of the multiplexing in accordance with the state of the network~~response to the stop command~~, and

in which~~,~~ ~~when the multiplex unit stops multiplexing in response to the stop command,~~ the encoding unit calculates based on the multiplexing-completion signal an area occupied by the encoded data in the storage unit, releases the area occupied by the encoded data, and controls a bit rate of the encoding of further received data based on the area that was occupied by the encoded data~~continues the encoding process until the area occupied by data in the storage unit is larger than a predetermined value~~.

11. (currently amended) An ~~The~~ encoding/transmitting apparatus ~~according to claim 1~~,

comprising:

input means for inputting data that includes video data;

encoding means for encoding the data input by the input means;

storage means for storing encoded data generated by the encoding means;

multiplexing means for multiplexing the encoded data stored in the storage means and transmitting the multiplexed data to a predetermined receiving apparatus through a network; and

monitoring means for monitoring a state of the network, and for generating a stop command and supplying the stop command to the multiplexing means when the state of the network is undesirable,

in which the encoding means stops an encoding process when an area occupied by data in the storage means is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage means is smaller than the predetermined value,

in which the multiplexing means stops multiplexing in response to the stop command, and

in which, when the multiplexing means stops multiplexing in response to the stop command, the encoding means continues the encoding process until the area occupied by data in the storage means is larger than a predetermined value,

wherein the input means inputs data that includes audio data, and the encoding/transmitting apparatus further comprises audio-data output control means for fading-out or fading-in the audio data before the audio data is received by the encoding means, in which the encoding means controls the audio-data output control means to fade-out the audio data to be encoded and then stops an encoding process when

an area occupied by data in the storage means is larger than a predetermined value, and the encoding means controls the audio-data output control means to fade-in the audio data to be encoded and then performs the encoding process when the area occupied by the data in the storage means is smaller than the predetermined value.

12. (currently amended) An ~~The~~ encoding/transmitting method ~~according to claim 6~~, comprising:

inputting data that includes video data;

encoding the data input in the step of inputting;

storing, in storage unit, encoded data generated in the step of encoding the data; and

multiplexing the encoded data stored in the storage unit by use of a multiplexing unit and transmitting the multiplexed data, to a predetermined receiving apparatus through a network; and

monitoring a state of the network, and generating a stop command and supplying the stop command to the multiplexing unit when the state of the network is undesirable,

in which the encoding stops when an area occupied by data in the storage unit is larger than a predetermined value, and the encoding is performed when the area occupied by the data in the storage unit is smaller than the predetermined value,

in which the multiplexing stops in response to the stop command, and

in which, when the multiplexing stops in response to the stop command, the encoding continues until the area occupied by data in the storage unit is larger than a predetermined value,

wherein a step of fading-out the audio data to be encoded is carried out and then the encoding stops when an

area occupied by data in the storage unit is larger than a predetermined value, and a step of fading-in the audio data to be encoded is carried out and then the encoding is performed when the area occupied by the data in the storage unit is smaller than the predetermined value.

13. (currently amended) An ~~The~~ encoding/transmitting apparatus ~~according to claim 10~~,

comprising:

an encoding unit to encode received data that includes video data;

a storage unit to store encoded data encoded by the encoding unit;

a multiplex unit to multiplex the encoded data received from the storage unit so as to produce multiplex data and transmit the multiplexed data to a predetermined receiving apparatus through a network; and

a determining unit to monitor a state of the network, and generate a stop command and supply the stop command to the multiplex unit when the state of the network is undesirable,

in which the encoding unit stops an encoding process when an area occupied by data in the storage unit is larger than a predetermined value, and performs the encoding process when the area occupied by the data in the storage unit is smaller than the predetermined value,

in which the multiplex unit stops multiplexing in response to the stop command, and

in which, when the multiplex unit stops multiplexing in response to the stop command, the encoding unit continues the encoding process until the area occupied by data in the storage unit is larger than a predetermined value,

wherein the encoding unit encodes received data that includes audio data and the video data, and the encoding/transmitting apparatus further comprises an audio-data output control unit to fade-out or fade-in the audio data before the audio data is received by the encoding unit, in which the encoding unit controls the audio-data output control unit to fade-out the audio data to be encoded and then stops an encoding process when an area occupied by data in the storage unit is larger than a predetermined value, and controls the audio-data output control unit to fade-in the audio data to be encoded and then performs the encoding process when the area occupied by the data in the storage unit is smaller than the predetermined value.

14. (new) The encoding/transmitting apparatus according to claim 1, wherein the encoding means stops the encoding when the area occupied in the storage means by the encoded data is larger than a predetermined value, and carries out the encoding when the area occupied by the data in the storage means is smaller than the predetermined value.

15. (new) The encoding/transmitting apparatus according to claim 14, wherein the inputted data includes audio data, and the encoding/transmitting apparatus further comprises audio-data output control means for fading-out the inputted audio data before the encoding is stopped, and for fading-in of the inputted audio data when the encoding is again started.

16. (new) The encoding/transmitting method according to claim 6, wherein the encoding is stopped when the area occupied in the storage unit by the encoded data is larger than a predetermined value, and the encoding is again started when the area occupied by the data in the storage unit is smaller than the predetermined value.

17. (new) The encoding/transmitting method according to claim 16, wherein the inputted data includes audio data, and the encoding/transmitting method further comprises fading-out the inputted audio data before the encoding is stopped, and fading-in of the inputted audio data when the encoding is again started.

18. (new) The encoding/transmitting apparatus according to claim 10, wherein the encoding unit stops the encoding when the area occupied in the storage unit by the encoded data is larger than a predetermined value, and carries out the encoding when the area occupied by the data in the storage means is smaller than the predetermined value.

19. (new) The encoding/transmitting apparatus according to claim 18, wherein the inputted data includes audio data, and the encoding/transmitting apparatus further comprises an audio-data output control unit that fades-out the inputted audio data before the encoding is stopped, and that fades-in of the inputted audio data when the encoding is again started.